

# APPENDIX C

## BASIC FUEL DISTRIBUTION FACILITIES

(Extracted from 5-301-series technical manuals.)

Facility Description	Facility Number
Drum and can cleaning and filling equipment and yard facilities for cleaning 5,000 drums and 20,000 cans per 20-hr day.	120113
Supplementary fittings and valves for reversing pumping from collapsible tank farm with capacity of 100,000, 50,000, or 40,000 gal.	120410
Reversing manifold for booster pump station for shore-to-ship loading using 6-in pipeline.	120411
Collapsible 10,000-gal storage tanks and equipment with total capacity of 40,000 gal,	120412
Shallow-water mooring (25 ft) for barges with 4,160-bbl capacity or small vessels with 11,500-bbl capacity. Includes anchors, chains, and 4 mooring and marking buoys.	120413
Reversing manifold for booster pump station for shore-to-ship loading using 8-in pipeline.	120414
Reversing manifold for booster pump station for shore-to-ship loading using 12-in pipeline.	120415
Submarine pipeline for unloading barges and small vessels in shallow water, Includes 6-in API pipe, heavy hose, weights, and buoy.	120426
Air-transportable hydrant refueling system, 100,000-gal storage capacity, 600-gpm pressure-controlled pumping capacity.	121000
Tactical marine terminal, 50,000-bbl storage capacity, 600-gpm receiving and transfer capacity.	121201
Pressure-reducing station for 4-, 6-, or 8-in main trunkline. Includes gate valves, plug valves, and reducing bypass line valves with adapters, couplings, gaskets, and nipples.	122004
Tanker mooring:	
3 legs, 60-ft depth	122104
3 legs, 90-ft depth	122105
3 legs, 120-ft depth	122106
5 legs, 60-ft depth	122107
5 legs, 90-ft depth	122108
5 legs, 120-ft depth	122109
7 legs, 60-ft depth	122110
7 legs, 90-ft depth	122111
7 legs, 120-ft depth	122112

Facility Description	Facility Number
Submarine pipeline	
6-in diameter, 60-ft depth, 2,750-ft length, API pipe with weights, heavy hose, and buoys.	122201
6-in diameter, 90-ft depth, 2,750-ft length, API pipe with weights, heavy hose, and buoys.	122202
6-in diameter, 120-ft depth, 2,750-ft length, API pipe with weights, heavy hose, and buoys.	122203
8-in diameter, 60-ft depth, 2,750-ft length, API heavy-wall pipe with weights, heavy hose, and buoys.	122206
8-in diameter, 90-ft depth, 2,750-ft length, API heavy-wall pipe with weights, heavy hose, and buoys.	122207
8-in diameter, 120-ft depth, 2,750-ft length, API heavy-wall pipe with weights, heavy hose, and buoys.	122208
12-in diameter, 60-ft depth, 2,750-ft length, API pipe with weights, heavy hose, and buoys.	122211
12-in diameter, 90-ft depth, 2,750-ft length, API pipe with weights, heavy hose, and buoys.	122212
12-in diameter, 120-ft depth, 2,750-ft length, API pipe with weights, heavy hose, and buoys.	122213
8-in diameter, 60-ft depth, 5,300-ft length, API heavy-wall pipe with heavy hose and buoys.	122314
8-in diameter, 90-ft depth, 5,300-ft length, API heavy-wall pipe with heavy hose and buoys.	122315
8-in diameter, 120-ft depth, 5,300-ft length, API heavy-wall pipe with heavy hose and buoys.	122316
12-in diameter, 60-ft depth, 5,300-ft length, API concrete-coated pipe with heavy hose and buoys.	122317
12-in diameter, 90-ft depth, 5,300-ft length, API concrete-coated pipe with heavy hose and buoys.	122318
12-in diameter, 120-ft depth, 5,300-ft length, API concrete-coated pipe with heavy hose and buoys.	122319
16-in diameter, 60-ft depth, 5,300-ft length, API concrete-coated pipe with heavy hose and buoys.	122320
16-in diameter, 90-ft depth, 5,300-ft length, API concrete-coated pipe with heavy hose and buoys,	122321
16-in diameter, 120-ft depth, 5,300-ft length, API concrete-coated pipe with heavy hose and buoys.	122322
20-in diameter, 120-ft depth, 5,300-ft length, API concrete-coated pipe with heavy hose and buoys,	122323

Facility Description	Facility Number
20-in diameter, 60-ft depth, 5,300-ft length, API concrete-coated pipe with heavy hose and buoys.	122324
20-in diameter, 90-ft depth, 5,300-ft length, API concrete-coated pipe with heavy hose and buoys.	122325
Riverbed-crossing welded pipeline:	
8-in diameter with alternate bypass for 750-ft crossing.	122501
8-in diameter with alternate bypass for 1,000-ft crossing.	122502
8-in diameter with alternate bypass for 1,250-ft crossing.	122503
8-in diameter with alternate bypass for 1,500-ft crossing.	122504
Booster station:	
1,400-bph capacity with two 2-stage pumps.	123101
2,800-bph capacity with two 2-stage pumps.	123102
7,000-bph capacity with four 2-stage pumps.	123103
Loading pump and manifold:	
700- to 1,400-bph capacity, 6-in pipe.	123104
2,000- to 2,500-bph capacity, 8-in pipe.	123105
Tank-farm switching manifold:	
4-in pipe with fittings, without pump.	123201
6-in pipe with fittings, without pump.	123202
8-in pipe with fittings, without pump.	123203
12-in pipe with fittings, without pump.	123204
Flood pump:	
785-bph capacity with 6-in manifold and two single-stage pumps.	123211
1,355-bph capacity with 8-in manifold and two single-stage pumps.	123212
1,355-bph capacity with 12-in manifold and two single-stage pumps.	123213
Tank pump:	
700-bph capacity with 6-in manifold and one single-stage pump.	123221
1,400-bph capacity with 8-in manifold and one single-stage pump.	123222
2,800-bph capacity with 12-in manifold and one 2-stage pump.	123223
Distribution manifold:	
6-in pipe for drum and can loading installation.	123231
8-in pipe for 10-station tank car loading installation.	123232
Transfer pump:	
700-bph capacity with 6-in manifold and one single-stage pump.	123301
1,400-bph capacity with 8-in manifold and one single-stage pump.	123302
2,800-bph capacity with 12-in manifold and one 2-stage pump.	123303
Tank:	
100-bbl capacity with 4-in pipe and fittings.	123401
250-bbl capacity with 4-in pipe and fittings.	123402
500-bbl capacity with 4-in pipe and fittings.	123403
500-bbl capacity with 6-in pipe and fittings.	123404
1,000-bbl capacity with 4-in pipe and fittings.	123406
1,000-bbl capacity with 6-in pipe and fittings.	123407

Facility Description	Facility Number
3,000-bbl capacity with 6-in pipe and fittings.	123408
3,000-bbl capacity with 8-in pipe and fittings.	123409
10,000-bbl capacity with 6-in pipe and fittings.	123411
10,000-bbl capacity with 8-in pipe and fittings.	123412
10,000-bbl capacity with 12-in pipe and fittings.	123413
50,000-bbl capacity with 8-in pipe and fittings.	123416
50,000-bbl capacity with 12-in pipe and fittings.	123417
Petroleum base laboratory building:	
Steel frame bldg with interior, 50 ft by 60 ft, tropical and desert zones.	123511
Steel frame bldg with interior, 50 ft by 60 ft, temperate zone.	123512
Wood frame bldg with interior, 48 ft by 48 ft, tropical and desert zones.	123521
Wood frame bldg with interior, 48 ft by 48 ft, temperate zone.	123522
Pump station fuel supply:	
for 2-pump facilities without tank or pump.	124201
for 4-pump facilities without tank or pump.	124202
Loading facility:	
for loading 2 tank trucks simultaneously.	124302
for loading 5 tank trucks simultaneously.	124304
for loading 10 tank trucks simultaneously.	124306
Collapsible tanks, with equipment:	
five 10,000-gal tanks with one centrifugal pump and fittings.	124501
ten 10,000-gal tanks with one centrifugal pump and fittings.	124502
Forward area refueling equipment (FARE) system with tanks:	
1,000-gal storage capacity.	124601
5,000-gal storage capacity.	124602
10,000-gal storage capacity.	124603
Refueling system for rotary and fixed-wing aircraft.	
support area refueling system, 30,000-gal storage capacity.	124604
rear area refueling system, 300,000-gal storage capacity.	124606
support area refueling system, 30,000-gal storage capacity with 12-point flight-line manifold.	124607
rear area refueling system, 300,000-gal storage capacity with 24-point flight-line manifold.	124608
support area refueling system, 50,000-gal storage capacity with 12-point flight-line manifold.	124609
Fuel transfer facility for unloading tank car (2 products, 5 stations)	124701
Pipeline--pipe and accessories:	
1,000 ft of 4-in grooved lightweight tubing.	125001
1,000 ft of 6-in grooved lightweight tubing.	125002
1,000 ft of 8-in grooved lightweight tubing.	125003
1,000 ft of 12-in grooved lightweight tubing.	125004
1 mile of 4-in grooved lightweight tubing.	125006
1 mile of 6-in grooved lightweight tubing.	125007

Facility Description	Facility Number
1 mile of 8-in grooved lightweight tubing.	125008
1 mile of 12-in grooved lightweight tubing.	125009
5 miles of 4-in grooved lightweight tubing.	125011
5 miles of 6-in grooved lightweight tubing.	125012
5 miles of 8-in grooved lightweight tubing.	125013
5 miles of 12-in grooved lightweight tubing.	125014
1,000 ft of 4-in grooved API pipe.	125016
1,000 ft of 6-in grooved API pipe.	125017
1,000 ft of 8-in grooved API pipe.	125018
1,000 ft of 12-in grooved API pipe.	125019
1 mile of 4-in grooved API pipe.	125021
1 mile of 6-in grooved API pipe.	125022
1 mile of 8-in grooved API pipe.	125023
1 mile of 12-in grooved API pipe.	125024
1,000 ft of 4-in beveled API pipe.	125031
1,000 ft of 6-in beveled API pipe.	125032
1,000 ft of 8-in beveled API pipe.	125033
1,000 ft of 12-in beveled API pipe.	125034
Pump station:	
for 4-in pipeline, 2 pumps with accessories.	125201
for 6-in pipeline, 4 pumps with accessories.	125202
for 8-in pipeline, 4 pumps with accessories.	125203
for 6-in coupled pipeline, 1 pump.	125204
for 6-in coupled pipeline, 2 pumps.	125205
Foam firefighting system, complete with 10,000-gal storage capacity, pump, and dispensing equipment.	125207
Collapsible 4-in assault hoseline system with pump and accessories.	125208
Electrical generation and distribution system for 6-in pipeline pump station.	125212
Pipeline suspension for 8-in line:	
200-ft span.	125301
400-ft span.	125302
Drum washing, repairing, and testing facility:	
interior for washing, repairing, and testing plant, 80 ft by 80 ft.	125501
interior for power plant with 2 generating units, 2 boilers, and welding shop.	125502
drum washing and testing bldg, steel frame, 80 ft by 80 ft; spray bldg, 10 ft by 20 ft, temperate zone.	125511
power plant bldg, wood frame, phase 1, 32 ft by 80 ft.	125520
drum washing and testing bldg, wood frame, 80 ft by 80 ft; spray bldg, 10 ft by 20 ft, temperate zone.	125521
power plant and welding shop, with interior, 32 ft by 80 ft, temperate zone.	125522
Jetty, 14-ft by 1,000-ft walk and pipeway with 40-ft by 70-ft wharf.	125701
Tanker watering service facilities with 42,000-gal water storage tank and 245-gpm centrifugal pump.	125702

Facility Description	Facility Number
Hose derrick parts for wharfs.	125703
Pipe and accessories for tanker discharge at dock:	
4-in diameter, 1,000-ft length API pipe for T-1 tanker discharge.	125801
6-in diameter, 1,000-ft length API pipe for T-1 tanker discharge.	125802
8-in diameter, 1,000-ft length API pipe for T-2 tanker discharge.	125803
12-in diameter, 1,000-ft length API pipe for T-2 tanker or supertanker discharge.	125804
16-in diameter, 1,000-ft length API pipe for supertanker discharge.	125805
Pressure regulator station for 6-in and 8-in military pipelines.	125901